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QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

EXAMINER
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SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2618

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 5-14, 18-25, 29- 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al (US 6,556,838).

Consider claims 1, 5-11. Baker teaches a method comprising:

keeping a running history, up to a predetermined length, of power control instructions included in a first plurality frames received in one direction on a link of a channel, the first frames being queued before processing (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); and

generating power control commands for a second plurality of frames to be transmitted on a return direction of the channel, based at least in part on the running history being kept, in a manner that effectuates a slowing of response to the incoming power control instructions, the second frames also being batched for subsequent processing in batch form for transmission (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*).

Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*). Note that the value of a two bit command would of course depend on the number of 0's and 1's in the command.

As to claim 12, note that Baker teaches the operations being performed in a gateway of a wireless communication system (*Baker teaches that one station could be a base station, or gateway, see column 1, lines 65 – column 2, line 11*).

As to claim 13, note that Baker teaches the operations are being performed in an emulated gateway and a gateway simulator of a wireless communication test system (*Note that Baker's arrangement is an emulator see column 2, lines 47-57*).

As to claims 14, 18-24. Baker teaches a gateway of a wireless communication system (*Baker teaches that one station could be a base station, or gateway, see column 1, lines 65 – column 2, line 11*) comprising:

a first plurality frames on a first link of a channel, and each of said first frames include a power control instruction, and the transceiver outputting the power control instruction included in each of said first frames (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*);

generating a second plurality of frames for a second link of the channel, wherein the system keeps a running history, up to a predetermined length, of the power control instructions included in the first frames, and generate power control commands for the second frames based at least in part on the running history being kept, in a manner that

Art Unit: 2618

effectuates slowing of responding to the incoming power control instructions (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*).

Baker lacks a teaching of the gateway including a batch transceiver and processor for performing the process and batching the frames for transmission. Official Notice is taken that it is notoriously well known in the art to use batch transceivers and processor to perform communication processing. Therefore it would have been obvious to one of ordinary skill in the art to modify Baker as shown in the claims in order to utilize conventional circuitry arrangement to perform the process.

Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*). Note that the value of a two bit command would of course depend on the number of 0's and 1's in the command.

As to claims 25, 29-35 Baker teaches a wireless communication system, comprising:

a gateway (*Baker teaches that one station could be a base station, or gateway, see column 1, lines 65 – column 2, line 11*) receiving a first plurality frames in one direction on a link of a channel, and queuing the first frames, each of said first frames including a power control instruction (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*), and

the gateway generating a second plurality of frames for transfer in an opposite direction on a link of the channel, wherein the gateway: maintains a running history over a predetermined length, of the power control instructions included with the first frames, and generates power control commands for the second frames based at least in part on the running history being kept, in a manner that effectuates a slowing of response to the incoming power control instructions (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*).

Baker lacks a teaching of the arrangement being a testing system performed by emulators and simulators. Official Notice is taken that it is notoriously well known in the art to use emulation and simulation to test communication system arrangements. Therefore it would have been obvious to one of ordinary skill in the art to modify Baker as shown in the claims in order to test the communication system before it was actually implemented.

Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*). Note that the value of a two bit command would of course depend on the number of 0's and 1's in the command.

Consider claim 36. Baker teaches an apparatus comprising: means for keeping a running history, up to a predetermined length, of power control instructions included in a first plurality frames received on a first link of a channel, the first frames being grouped before their processing (*Baker see column 2, lines 46-67, note that Baker teaches*

Art Unit: 2618

*combining power control slots, or frames see especially column 4, lines 30-67*); and means for generating power control commands for a second plurality of frames to be transmitted on a second link of the channel, based at least in part on the running history being kept, in a manner that effectuate slowing response to the incoming power control instructions, the second frames also being grouped for subsequent processing in batch for transmission (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*). Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*). Note that the value of a two bit command would of course depend on the number of 0's and 1's in the command.

Consider claim 37. Baker teaches a method comprising: keeping a running history, up to a predetermined length, of power control instructions included in a first plurality frames received on a first link of a channel, the first frames being grouped before their processing (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); and generating power control commands for a second plurality of frames to be transmitted on a second link of the channel, based at least in part on the running history being kept, in a manner that effectuate slowing response to the incoming power control instructions, the second frames also being grouped for subsequent processing in batch for transmission (*note that the adjusted step size of Baker would result in a slowing of*

Art Unit: 2618

*response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65).* Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63* Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*). Note that the value of a two bit command would of course depend on the number of 0's and 1's in the command.

Baker lacks a teaching of the method being stored on machine-readable media as executable instructions. Official Notice is taken that it is notoriously well know in the art to store methods as executable instructions on machine-readable media. Therefore it would have been obvious to one of ordinary skill in the art to modify Baker to store the method as instruction on machine-readable media in order to allow the method to be easily transferred to a new machine.

Consider claim 38. Baker teaches a method comprising: emulating a gateway including receipt of a first plurality frames on a first link of a channel, and grouping said first frames for processing in batch form, each of said first frames including a power control instruction, and outputting the power control instruction includes in each of said first frames (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); a gateway simulator coupled to the gateway emulator (*Baker teaches that one station could be a base station, or gateway, see column 1, lines 65 – column 2, line 11. Note that Baker's arrangement is an emulator see column 2, lines 47-57*) to process the batched first frames in batch and to receive the power control instructions of the first frames

Art Unit: 2618

outputted by the gateway emulator, and to generate a second plurality of frames for a second link of the channel, the second plurality of frames also being batched before being handled by the gateway emulator in batch, wherein the gateway simulator keeps a running history, up to a predetermined length, of the power control instructions included in the first frames, and generate power control commands for the second frames based at least in part on the running history being kept, in a manner that effectuates slowing of responding to the incoming power control instructions (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*). Note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*). Note that the value of a two bit command would of course depend on the number of 0's and 1's in the command.

Baker lacks a teaching of the method being stored on machine-readable media as executable instructions. Official Notice is taken that it is notoriously well known in the art to store methods as executable instructions on machine-readable media. Therefore it would have been obvious to one of ordinary skill in the art to modify Baker to store the method as instruction on machine-readable media in order to allow the method to be easily transferred to a new machine.

### **Response to Amendment**

3. Applicant's arguments with respect to claims 1, 5-14, 18-25, 29-38 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached on Monday - Friday, 8:30am - 5:00pm.
7. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177.
8. The central fax phone number for the Office is 571-273-8300.

Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

Art Unit: 2618

**CENTRALIZED DELIVERY POLICY:** For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip J Sobutka/  
Primary Examiner, Art Unit 2618

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